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These comments are submitted by New Buildings Institute (NBI) and RMI. For questions, you may contact:

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These comments are co-signed by the following organizations: BlocPower, CLASP, Midwest Building Decarbonization Coalition, NRDC (Natural Resources Defense Council), Public Law Health Center, Rewiring America, Sierra Club, and The Wei LLC.

New Buildings Institute (NBI) and RMI are partners on the Codes for Climate initiative, which supports reducing building sector emissions in alignment with broader ambitions for climate action. Modern building policies, including codes and building performance standards (BPS), must prioritize decarbonization of buildings commensurate with the scale of the climate crisis, including by requiring or encouraging all-electric end uses in addition to stringent efficiency measures. We view the role of the Department of Energy (DOE) as critical in this work – the scale of investment potential and technical support provided nationally will be key in advancing building decarbonization across the U.S. We welcome the opportunity to provide input into the potential design of funding opportunities to ensure that full lifecycle decarbonization, health impacts, equity, and economic co-benefits are considered in potential project collaborations.

Briefly summarized, our response recommends the following:

- To align energy codes with urgent climate mitigation goals, DOE must prioritize efforts to move buildings toward all-electric energy use and ensure code updates will result in long-term reductions in greenhouse gas emissions.
- Code updates should be paired with complementary policies for existing buildings and support for implementation, enforcement, and compliance.
- Innovative partnerships, including interstate partnerships, can accelerate this effort.
- DOE should make a portfolio of grants with a diverse array of risk and ambition profiles.
- Longer periods of performance and larger budgets are needed to maximize outcomes.
- Concrete steps should be taken to ensure disadvantaged communities (DACs) are not only engaged, but given real agency and power over building policies.

2.1: How should DOE prioritize code updates? More specifically, should updates to the model energy code be prioritized based on potential energy and/or carbon savings as compared to the current baseline within each state? How should DOE prioritize updating to a code more advanced than the current model code?

& 2.3: Since each funded project is intended to enable updated building energy codes, what should DOE consider to be "updated" codes? Should it include ongoing code updates and/or planned future code updates? How far in the future is it reasonable to consider code updates? Should in-process code updates be prioritized higher than planned updates?

& 7.4: Should DOE prioritize energy codes and building measures that provide long-term energy savings?

Recommendation: All energy saving updates completed before the end of the grant period should be seen as "updated" but weight should be applied to funding the greatest carbon reductions and ensuring long-term savings.

All proposed projects where the final code will save more energy should count as "updated." In selecting proposals for code adoption funding, DOE should prioritize criteria that result in greenhouse gas emissions reductions such as the following:

- Scale of systemic impact: Prioritize jurisdictions where there is the greatest impact, whether measured by building source carbon emissions, building site carbon emissions, or building square footage (existing or planned starts). The criteria could be applied to existing buildings or relative to expected new construction.
- Scale of potential site carbon reductions: Prioritize applications aimed at reducing operational carbon, including through electrification or electric readiness. Allow applicants to model carbon savings and use those estimates in grant making.
- Scale of cross-sectoral decarbonization: Measures such as electric vehicle (EV) readiness in buildings may increase site energy use, but will also contribute to economy-wide decarbonization and should be viewed as a key part of code advancement.
- Most recent model code: Prioritize proposals looking to use no less than the penultimate version of the model energy code.
- Replicability: Prioritize proposals seeking to provide information (cost studies, impact analysis, code language, etc.) that could apply to a larger region, sister jurisdictions, or other scale of impact. Request that applicants describe how solutions will likely scale.
- Credibility: Prioritize proposals whose partners have a credible path to causing or improving code updates; for example, proposals including an agency with authority over code. Consider requesting or requiring letters of commitment or support from the relevant state code officials. In states with legislative or hybrid code update procedures, consider the legislature's likely response to proposers' activities in estimating credibility.
- Additionality: Prioritize proposals that could improve or cause a code update. For example, if a state must consider the latest International Energy Conservation Code

(IECC) in their code update process, estimate the likelihood of significant improvements caused by the proposed activities beyond a business-as-usual update.

Where priorities may conflict, ensuring that jurisdictions are likely to sustain the necessary updates should be held as additionally important in weighing of proposals. See our response to Q2.2 for further details. We additionally recommend considering states whose early progress advancing codes and other decarbonization policies may disadvantage them in these criteria, not only to avoid penalizing early movers, but also to create a diversified “portfolio” of different project types with a variety of risks and goals; see our response to Q1.3 for further details.

Code updates will only take the building stock and related stakeholders so far. Additional policies are needed to aid in the effectiveness of codes and ensure their long-term success in maintaining building decarbonization. Once occupied, new construction becomes an existing building, and ensuring that existing buildings are efficiently operated and consistently maintained should be a key priority of the award making; see our response to Q1.4.

Additional programming that supports realizing the efficiency and decarbonization potential of codes, and therefore should be prioritized in award making, include market-focused building hubs and collaboratives; training and education for designers, builders, installers, operators and occupants; and implementation and enforcement support for building code officials.

1.4: How can innovative approaches that address existing buildings (e.g., BPS) complement and be better aligned with energy codes which primarily address new construction? Are there effective models that can be replicated? If so, what are these models and what makes them successful?

Recommendation: Prioritize work that considers the full lifecycle of a building; Align new and existing building (EB) policies.

To align with climate goals, EB policies must be advanced to decarbonize the building stock already in existence, which will comprise most of the buildings still standing by 2050. Ambitious new building policies and codes are among the most cost-effective ways for jurisdictions to build the market for EB retrofits. By pairing new construction codes with EB policies, markets are readied for technology and construction changes needed to enhance EB renovations.

To date most US BPS ignore alignment with new construction. For example, in Washington, DC, one in ten new office buildings and three in ten new multifamily buildings will fall below the BPS threshold. This lack of intentional alignment puts both jurisdictions and building owners in a precarious position to potentially require a major retrofit of a new building within the first five years of its life. Misaligned codes and BPS may require different proofs of compliance, increasing administrative burden. DOE should prioritize grant awards for projects that prioritize policy complementarity and consider the full lifecycle of a building—that is, encourage jurisdictions to plan how all buildings will be required to maintain and improve energy and emissions performance over time. Requiring alignment of new construction codes and BPS through modeling and target setting will be key. Relevant policies might include BPS, incentive programs, financing programs, or other similar initiatives to improve EBs. Project teams that have experienced partners in both new construction and EB policies should be prioritized.

EB can also be addressed through codes. Updates that consider how to incorporate key areas of efficiency and decarbonization through existing renovation and retrofit triggers, and propose new triggers for taking on renovations that may include distributed energy resources (DERs), additional efficiency, pre-wiring for electrification, retro-commissioning and testing, and other measures, will position states and jurisdictions where the passage of a BPS may not be possible to still deliver solutions in their EB stock.

1.5: What should DOE include in a potential RECI FOA to encourage consideration of resilience aspects of energy codes, like passive survivability and grid resilience, in addition to energy and emissions savings?

& 2.4: How should DOE consider broader building code updates intended to address resilience in addition to energy as part of the prioritization process? How should DOE prioritize those code updates that include both energy and resilience measures?

Recommendation: Prioritize applications with large resilience co-benefits and low trade-offs; focus funding on resilience measures that also reduce site energy and/or emissions.

Advanced codes and policies can be multifaceted tools for energy savings, greenhouse gas emissions reduction, and multiple dimensions of resilience including passive survivability, peak demand reduction, outdoor thermal comfort improvements, and reliable power supply. We recommend that DOE require applicants to estimate the resilience-related co-benefits of their intended code updates, along with any trade-offs they intend to make that would improve resilience but reduce potential energy savings. In many cases, we anticipate co-benefits will significantly outweigh trade-offs; such applications should be prioritized. Below are three key considerations for codes that have the potential to reduce both energy use and hazard risk.

Urban Heat Island Measures: Surfaces, Shade, Plants, Cooling

We recommend DOE prioritize proposals that address urban heat island effects from states or partnerships in urban areas, or that include city agencies. The number of hospitalizations and deaths due to extreme heat have been growing and expanding northward. Urban areas are the most susceptible, holding heat for longer, experiencing limited diurnal temperature swings, and having higher air-pollution levels to begin with. These, in turn, contribute to heat-related deaths and illnesses including respiratory difficulties, heat cramps, heat exhaustion, and heat stroke. Vulnerable populations are particularly at risk during these events.

Heat events contribute to a feedback cycle that accelerates climate change: heat islands increase demand for electricity in summer, utilities rely on fossil fuel power plants to meet this demand, and greenhouse gas emissions increase. Numerous building design options can simultaneously reduce the urban heat island effect, save energy from cooling load in the short term, and curtail this long-term feedback cycle. These include cool surfaces, shading and increases in green spaces. Research suggests that “mitigation of urban heat islands can potentially reduce national energy use in air conditioning by 20% and save over $10B per year in energy use and improvement in urban air quality."

To fully and equitably address risks to health and safety from heat islands, mechanical air conditioning (AC) will be necessary in many places: an apparent trade-off between energy use reduction and resilience. In historically temperate climates, many buildings lack AC, especially below market rate, and current building codes do not require the installation of AC. Applicants may be able to turn this trade-off into a means to systemically reduce emissions in the long term, however: for example, heat pumps configured for both AC and heating could be required in new AC installations, reducing future reliance on fossil fuels for heating. We recommend DOE encourage applicants to explore these opportunities in their proposals.

Grid Interactivity

We recommend that DOE consider prioritizing updates that include grid-interactive resilience features, such as "islanding" and automated demand response capabilities. These features complement other climate-aligned code features such as electric-, solar-, storage-, or EV-ready provisions (or requirements) to minimize emissions and maximize both building- and system-level reliability during hazard events.

In the best case, grid interactivity policy through codes and BPS would not solely encourage these prescriptive measures. We recommend the DOE particularly prioritize applications that intend to take a measurement- and performance-based approach to reducing emissions and improving reliability. Key metrics for grid optimization have been identified to include grid peak contribution, onsite renewable utilization, grid carbon alignment, short- and long-term demand flexibility, and resiliency. Other innovative measures should be explored. Areas currently or projected to be undergoing renewable energy curtailment and code updates that focus on electrification are prime candidates to explore and implement performance-based grid integration measures.

Back-up Ready Codes

A third approach to simultaneously support resilience and carbon reductions is "back-up ready" codes: requiring that a building's heating, ventilation, and cooling (HVAC) system can be connected to a back-up energy supply in case the primary energy supply is disrupted. Reliability of energy is an important and growing concern, with critical health and safety implications.

Existing code options with efficiency and carbon reduction benefits, such as solar-ready and electric-ready codes, address some of these issues but may not incorporate necessary features to improve survivability during a power disruption. Policies encouraging high-performance grid interactivity and requiring energy storage would improve survivability while also delivering affordability and carbon reduction benefits when combined with smart rate design.

All-electric buildings lend themselves to back-up through battery storage and, optionally, onsite renewables. But electric equipment's reliability is often questioned. A "back-up ready" approach would bolster the reliability advantages of electric buildings. Diesel generators, while common as a back-up electricity supply option, pose serious health hazards when used incorrectly in addition to emitting local and climate pollutants. Back-up ready codes could encourage the use of energy storage over diesel generators.

Options for DOE activities in support of a back-up ready code:

- Assess manufacturer readiness to offer heating equipment that can be connected to external, temporary power supplies.
- In multiple loss-of-power scenarios, assess cost-effectiveness, potential coverage, and duration of reliability extension of back-up options such as stand-alone battery storage, solar plus storage, storage-ready EVs, Federal Emergency Management Agency (FEMA) solar/storage units, diesel generators, etc.
- Assess how grid-integration controls might also serve as power management tools in back-up energy supply use cases.
- Provide technical assistance or encourage grantees to seek expert partners to develop model back-up ready code provisions.

Regionally appropriate resilience measures that do not save energy (e.g., elevating or fire-hardening buildings) should not be the only code advancements proposed in an application for a grant under the potential FOA, especially since there are federal funding sources that may be braided to explicitly support these measures. Streamlining the braided-funding program review process would enhance the complementarity of energy and emission reductions and resilience improvements through code updates and would require inter-agency coordination.

7.6: How should DOE view applications that consider maximizing non-energy benefits such as building and grid resilience, occupant safety and health, water conservation, embodied carbon, and other environmental externalities?

Recommendation: Prioritize "win-wins" for energy and non-energy benefits; encourage clear communication of co-benefits.

Many non-energy benefits can be achieved alongside energy efficiency and decarbonization in "win-win" situations. This should include occupant safety and health as well as embodied carbon, among others. We recommend that grant making prioritize programs with the greatest overall benefits, particularly when applicants can demonstrate that their target measures have higher co-benefits than trade-offs between benefit types.

Electrifying end uses through heat pumps and induction cooking has significant energy benefits as well as climate benefits. It also reduces the risk that combustion products contribute to poor indoor or outdoor air quality, which harms occupant and community health in numerous ways:

- Overall, combustion emissions from buildings account for 37% of premature deaths associated with air pollution. For example, burning fuels releases the pollutant $PM_{2.5}$, which is related to cardiovascular and respiratory disease and death. A 2021 study suggests that 18,300 early deaths and $205 billion in health impacts have been caused by $PM_{2.5}$ resulting from indoor combustion across residential and commercial sectors.

- Many ordinary use cases for gas stoves, such as boiling water or baking a cake, increase nitrogen dioxide levels in kitchens to levels that exceed guidelines set by the World Health Organization. Nitrogen dioxide is especially harmful to children's developing respiratory, cardiovascular, and neurological systems.

About 11% of global greenhouse gas emissions issue from embodied carbon in the building sector. Case studies suggest that these emissions can be reduced by 19-46% at negligible cost premiums.

Including and clearly communicating about co-benefits may also increase the likelihood of advanced code adoption, since these messages often speak to more immediate, tangible benefits of code updates compared to climate or energy benefits. We recommend prioritizing proposals including partners or non-partner stakeholders who are well positioned to authentically advocate for co-benefits in a way that will resonate with audiences in the state, such as healthcare and public health professionals, home and workplace safety advocates, consumer affordability advocates, and so on.

1.3: How can a potential RECI FOA be designed to foster innovative approaches to code implementation, such as stretch codes, zero net-energy codes, and building performance standards? What key innovative approaches best support building energy code updates? What other applicable example activities should DOE mention for this topic area in a potential FOA?
& 3.1: What types of strategic partnerships should DOE emphasize that can help best address challenges facing states, local governments, and the broader industry in energy code implementation (e.g., network of states and local governments to enhance implementation, national energy codes collaborative to provide thought leadership on codes activities, etc.)?

Recommendation: Diversify levels of innovation and risk among grants; permit multi-state partnerships; encourage partnerships to bring in key method experts.

We believe partnerships and innovative approaches go hand in hand. Innovative content (such as beyond-model code) and innovative process (such as designing solutions for non-technical barriers to code adoption and compliance) both require diverse knowledge and skills. At the most general, applicants should provide a well-reasoned gap analysis of their goals, required capabilities, and partners' fit to those capabilities.

More innovative theories of change may entail both higher risk and higher reward because they aim to alter political or market conditions to enable more ambitious code updates. We recommend taking a portfolio approach, providing grants to applicants with a diverse mix of low-risk, tried-and-true theories of change and complex or innovative theories of change.

For example, a palatable code update in a state or model code body may be incremental due to perceptions of market immaturity or sparse example developments. A partnership of advanced code experts and decarbonization-focused states may operate with different constraints—perhaps on compatibility with emissions reduction goals, rather than magnitude of change from present practice. We recommend that DOE and code-making bodies deliberately shift regulatory and programmatic focus from energy efficiency to energy performance and carbon emissions, with the aim of improving community health, resilience and equity.

Such an approach may require novel methods or provisions, proof of feasibility, constituent support, cost effectiveness, and so on. In the proposed portfolio schema, such an application may be rated as high impact but also relatively high risk, so would be evaluated against other high-impact, high-risk applications to populate that portion of the RECI grant portfolio.

We recommend explicitly permitting partnerships including multiple states. Partnerships across geographic areas focused on common interests would supplement regional networks and facilitate rapid code advancement nationally. Continuing the example: Alignment between governments through a climate-focused collaborative would be especially valuable in two ways. First, interstate collaboratives could form a crucible for advanced code proposals ahead of formal model code development (ICC or ASHRAE) proceedings, improving the likelihood of highly efficient provisions' inclusion. Second, if a collaborative's proposals are not adopted into model code, the collaborative could provide an alternative promulgation pathway.

Multi-state partnerships also foster relationships with late-adopter states' geographic, procedural, and cultural neighbors who are further ahead to share peer learnings. States are more likely to trust their peers as messengers than other messengers, so we recommend prioritizing applications that build peer relationships over those that distill and share case studies. This type of facilitation may best be completed through the Regional Energy Efficiency Organizations (REEOs) where the alignment is within a single region or between two regions. Where more than two regions are represented, or where there are conflicts in the REEOs' mission and the needs of the states, especially around decarbonization, a national or alternate team may be better positioned to facilitate this type of relationship.

Situational factors other than the availability of technology or appropriate code provisions constrain code advancement and compliance, and they should be targeted directly. These situational constraints are diverse, including considerations such as political economy; the statutory obligations of code-making bodies and procedures; and the attitudes, beliefs, and decision environments of builders, contractors, businesses, and households. We recommend encouragement of partnerships with experts in the non-building-science constraints and intervention methods most central to each applicant's goals. For example, an applicant that intends to increase the skilled labor supply and the rate at which contractors comply with code could partner with experts in education and training program design. These experts should demonstrate up-to-date, evidence-based knowledge of how to improve target outcomes; in the case of training and education, these may include persistence, credential attainment, and post-program success. Conferring with the target audience to understand their lived experience of these constraints is also critical.

2.2: How should DOE ensure that States have implementation plans to sustain the adoption of model energy codes over time?

Recommendation: Require that funded updates require a roadmap/plan for future updates, prioritizing efforts that legislatively peg future updates to time certain criteria; require all updates be matched with training or other implementation actions.

Emphasis should be placed on the value of creating a plan for regular code update development, adoption, and implementation. Each state undergoing a code or policy update through the FOA should be required to complete a comprehensive plan through 2040 on how updates will continue in alignment with state climate goals. States that have been applauded for maintaining regular code updates have one of two things: legislative mandates, or a plan to achieve a certain goal that requires code updates. While ensuring the additionality of applicants' proposed activities as described in our response to Q2.1, DOE should consider prioritizing states that have shown the ability to update their codes on an ongoing, regular cycle, and aid states in passing legislation that sets a floor for frequency of updates and efficiency targets.

Ensure any code developed or proposed has programming targeted to completing training statewide for local jurisdictions, code officials, designers, and other key stakeholders. Any training or programming related to implementation or compliance should seek local officials' input regarding needs in their jurisdictions, such that they are prepared and bought in to execute their implementation and enforcement duties. Often, stalled implementation and updates are related to pushback in the industry. Industry pushback can come in many forms, but the final leg of implementation is in construction trades. Where the trades are uninformed, compliance will be lacking, creating a cycle of feedback that "we can't meet the current energy code." Construction trades do not universally speak English, though that is the primary language that education is offered in. Ensuring translation of key materials into Spanish primarily and other languages as identified by local stakeholders could be a valuable addition to DOE's nationwide support for codes.

Finally, some states engage with energy code circuit riders to reach more rural communities and provide support to code officials, but these programs are neither universal nor consistent in their delivery of services. This program could be expanded, both in geography and in the expectations of such a program, removing another barrier to adoption: that code officials do not have time to complete energy reviews and inspections. By providing funding to pay dedicated full-time employees to support review, inspection and education on the energy code specifically, DOE can remove this objection, gain better overall compliance, and support local jobs. An expanded program administered through a combination of State Energy Offices (SEOs), REEOs, and/or a national partner could best ensure both locally appropriate and nationally consistent delivery and accountability.

4.1: Is a period of performance of 3-5 years reasonable? If not, what is appropriate and why? & 4.2: What level of funding would be appropriate to achieve the draft objectives over a 3- to 5-year project period?

Recommendation: Period of Performance set at 5 years; Funding levels starting at $4 million
Due to the nature of state level cycles for code development, adoption, and compliance, a three-year cycle for performance is likely insufficient to accomplish the goals of many states. Any given three-year cycle may not include key milestones necessary to show success and progress in a meaningful way. Finally, a 5-year cycle will include both the finalization of the 2024 and 2027 IECC for consideration within the states. For work considering BPS, the longer period is also critical to adequately include time for policy development, adoption, rulemaking, technical analysis and move into planning for implementation and compliance.

As codes and policies become more stringent and climate goals are honed, it is increasingly important to support robust stakeholder engagement that will by its nature take additional time and resources; see our response to Q5.5, Q5.6, and Q7.10 for further details. As DOE has indicated, sustained updates and progress are necessary, and a longer period with dedicated funding will be better able to aid states and partners in planning and implementation of sustained work; see our response to Q2.2 for further details. Starts and stops to both funding, work plans, and potential partner transitions all jeopardize continuous progress.

A robust partnership including at least one state agency and partners representing key stakeholders, including DACs, and holding necessary expertise, funded over a five-year period of performance, will require significant funding to achieve its objectives. We suggest no less than $4 million as an order-of-magnitude benchmark to fund the work of such a partnership. Where projects take on multiple aspects of development, adoption and implementation, additional funding may be necessary to be successful. In the description of funding availability we recommend DOE be explicit about access to modeling or analysis by Pacific Northwest National Labs.

7.8: What types of buildings should applicants focus on, including new and/or existing residential, multifamily, and/or commercial buildings?

Recommendation: Commercial and Residential for Codes; Commercial (including multifamily) for BPS.

For states focusing on code updates all building types should be included, and both residential and commercial code updates should align. Base code updates should be considered where both residential and commercial energy codes are updated simultaneously. Stretch code development should consider both.

BPS should cover commercial buildings and multifamily buildings. Recognizing that affordable housing owners, low- and middle-income households, and some small businesses may need financial and technical assistance for compliance, applicants pursuing innovative policy approaches to address barriers in tandem with code updates should be prioritized.

5.5: How can applicants ensure community-based stakeholders/organizations (especially underserved communities) are engaged and included in the planning, decision-making, and implementation processes (e.g., including community-based organizations on the project team)?

& 5.6: How can DOE support meaningful and sustained engagement with relevant disadvantaged communities?

& 7.10: How can the applicants include meaningful engagement with all communities in the region, with a focus on disadvantaged communities, tribal communities and communities with environmental justice concerns, and communities facing the transition away from fossil fuel economies, as well as with labor unions and other key stakeholders as part of the application process?

Recommendation: Deliver material benefits, like high-road career training; provide flexible time and resources to meet needs; encourage power-sharing with DACs.

To fulfill Justice40 requirements, 40% or more of the benefits of this program's funding must accrue to disadvantaged communities (DACs). We recommend preferential treatment for direct benefits, such as funding provided to DAC-representative organizations and earnings-potential-improving training provided to DAC members. See also our response to Q3.1 regarding appropriate inclusion of career training methodology experts in partnerships. Additionally, facilitate partnerships' ability to stack or braid funding from other sources to deliver progressive career training and support to workers in DACs beyond code-specific training.

The adequate time and funding identified as critical in our response to Q4.1 will help appropriately resource community-based organizations and other local stakeholders, who may have different needs from typical DOE grantees. Some needs we anticipate include DACs' relatively constrained time and money compared to more privileged groups or individuals. DOE can address this gap by providing resources and reducing barriers. For example, allocate funding to frontline community-based organizations to participate in local code adoption processes. Additionally, require or encourage applicants to hold meetings that meet DACs' needs. For example, meetings should be offered in multiple locally appropriate languages, both online and in person, at accessible locations, and at multiple times of day, with free meals and/or on-site childcare.

Sufficient time and resources will also provide space for relationships between states and stakeholders, including DACs and groups that represent them, to change. Typical code adoption processes have limited or no engagement with DACs. Where engagement occurs, it tends to be episodic, centering around single issues and events chosen by the state, and may begin and end with meetings to inform community members of plans already made, with little possibility of revision to respond to concerns. Often, statutorily mandated code councils are not required to include representatives of DACs and no other provisions obligate engagement with them as stakeholders. These patterns uphold the disadvantage that makes these communities vulnerable to environmental injustice by withholding power and agency for the state.

To help address these patterns, we recommend explicitly including DAC-representative organizations in the list of organization types that may join partnerships. Additionally, we recommend DOE require and evaluate applicants' power-sharing plans for credibility and equity. We recommend power-sharing plans be required to address the following:

- Which communities applicants define as DACs for the purposes of their application.
- How power will be distributed between stakeholders (including DACs) in their code advancement activities, including the formal code update process. In addition to describing power-sharing procedures (e.g., inclusion on code councils), we recommend requiring that applicants identify stakeholder roles using a standard tool such as Arnstein's Ladder so that applicants' power-sharing plans can be compared.
- Applicants' rationale for their intended distribution of power, the limitations on power sharing, and how they plan to address those limitations
- How relationships are defined in writing between partners. For example, applicants should attach memoranda of understanding (MOUs) executed between partners. Note whether MOUs are present between DAC-representative organizations and others. If present, assess whether MOUs follow best practices establishing mutual benefit between organizations with power asymmetries, such as DACs and governments. (See this community-based research MOU template as one example.)
- To begin to address conditions created by inequitable or absent past engagement, applicants should summarize the history of energy, environment, and housing policy and practice between DACs and the state, including those DACs not represented by partnership members.

Applicant-specific allocation of power to DACs will not uniformly alter grantees' activities in a specific direction, since DACs' needs and agendas are diverse. In many cases, however, we predict that power-sharing will be compatible with the integration of community engagement on energy codes with consideration of broader housing policies and programs. A narrow focus on codes, particularly since they most often affect new, relatively expensive housing, may eliminate paths for DACs to pursue their material energy- and housing-related interests. In addition to equity and justice benefits, this widened lens may create the possibility for more innovative, complementary, systemically effective building policy (for example, whole-home retrofit programs; see also our response to Q1.4).